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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,174	10/27/2003	Hong Soon Nam	5895P043	7122
8791 7590 09/19/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER TRAN, PHUC H	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 09/19/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/695,174

**Applicant(s)**

NAM ET AL.

**Examiner**

PHUC H. TRAN

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-16 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☒ Claim(s) 4,6 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Bruckman (Pub. No. 2002/0118700).

- With respect to claims 1-3, Bruckman teaches a resource allocation method for providing load balancing and fairness for a dual ring, the dual ring being shared by a plurality of nodes connected to local networks (e.g. the network in fig. 1 with dual rings and nodes share the network), comprising the steps of: determining whether a bandwidth allocation request message is received from one of other nodes (e.g. step 34 in Fig. 3); determining whether one or more of two rings of the dual ring fulfill a request of the bandwidth allocation request message on the basis of available bandwidths of the two rings and calculating weighted costs, if the bandwidth allocation request message is received (e.g. step 36 in fig. 3 and Fig. 6); allocating a path to one of the two rings having a lower weighted cost, if one or more of two rings fulfill the request of the bandwidth allocation request message (e.g. step 70 Fig. 6); providing a resource allocation information notification message to other nodes (e.g. step 40 in Fig. 3); and ending a process without allocation of a path, if one or more of two rings cannot fulfill the request of the bandwidth allocation request message (step 38 in Fig. 3).

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- With respect to claim 5, Bruckman teaches wherein the step of calculating weighted costs is performed in such a way that if the two rings cannot fulfill the request of the bandwidth allocation request message, the weighted costs are set to an infinite value, or values excessively larger than weighted costs for the case where the request of the bandwidth allocation request message can be fulfilled (e.g. Fig. 6 shows steps of costs for node with in the ring).

***Allowable Subject Matter***

3. Claims 4, and 6-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 8-16 are allowed.

The following is an examiner's statement of reasons for allowance: claims are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly discloses a resource allocation method for providing load balancing and fairness for a dual ring, the dual ring being shared by a plurality of nodes connected to local networks, comprising the steps of: setting a current state to a previous state; determining whether a downstream node is congested; setting an allowed rate using equation  $allow\_rate = my\_rate + (C - rev\_rate - my\_rate) / N$  (where allowrate is an allowed rate of a base node, C is a rate of a link, rev\_rate is a reserved rate, myrate is an own rate of the base node, and N is a number of nodes) and setting the current state to a null state, if the downstream node is not congested; determining whether an own rate of the base node is greater than an advertised rate of the downstream node, if the downstream node is congested; setting the allowed rate using equation

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$allow\_rate = \min[my\_rate + (C - rev\_rate - my\_rate)/N, advertised\_rate]$  (where  $advertised\_rate$  is an advertised rate) and setting the current state to a congested state, if the own rate of the base node is not greater than the advertised rate of the downstream node; determining whether the previous state is a congested state and whether a previous round trip time is not zero, if the own rate of the base node is greater than the advertised rate of the downstream node; setting the previous round trip time to the previous round trip time minus one, if the previous state is the congested state and the previous round trip time is not zero, and setting a current round trip time to the previous round trip time, if the previous state is not the congested state and the previous round trip time is zero; setting the allowed rate using equation  $allow\_rate = \max[my\_rate - \{RTT(c - rev\_rate)\}/2N, my\_rate - 2, advertised\_rate]$  and setting the current state to a congested state.; and providing a resource allocation information notification message to other nodes.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mor et al. (Pub. No. 2002/0018481) discloses resource reservation in a ring network.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuc Tran  
Assistant Examiner  
Art Unit 2616

P.t  
9/15/07

  
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SUPERVISORY PATENT EXAMINER 9/17/07